

AMENDMENTS TO THE CLAIMS

Claims 1-13 (Previously Cancelled Without Prejudice or Disclaimer)

14. (Currently Amended) A catheter comprising:
a shaft comprising proximal and distal ends~~[[;]]~~ ~~[[;]]~~
a tip at the distal end of the shaft having a tapered portion over which the tip outer diameter is gradually reduced~~[[;]]~~ ~~[[;]]~~
a distal terminus, an untapered length of shaft positioned adjacent the tapered portion opposite the distal terminus~~[[;]]~~ ~~[[;]]~~ and
two or more lumens, at least one of which is sized to receive a 0.035 inch guidewire, the lumens spaced apart from one another by a predetermined distance in the untapered length, a corresponding distance between the lumens in the tapered portion being different from the predetermined distance in the untapered portion;
wherein the distal terminus has an outer diameter measuring less than approximately 0.063 inch; and
the tapered portion of the tip has a length of approximately 3 millimeters or less.
15. (Currently Amended) A catheter as defined in claim 14, further comprising a cutting wire extending through at least a portion of one of the lumens and terminating ~~adjacent to~~ within the distal tip.
16. (Currently Amended) A catheter as defined in claim 15, wherein the cutting wire exits the lumen along a portion of the shaft and reenters the lumen through a distal skive hole ~~at a point adjacent the distal tip~~ in the untapered length of the shaft;
a tip length is defined between the distal skive hole and the distal terminus measuring is approximately 5 millimeters or less; and
the tapered portion is positioned between the skive hole and the distal terminus.
17. (Currently Amended) A catheter as defined in claim 15, further comprising a radiopaque marker within at the distal tip.

18. (Previously Presented) A catheter as defined in claim 17, wherein the radiopaque marker is contained in the lumen occupied by the cutting wire.

19. (Original) A catheter as defined in claim 14 wherein the shaft comprises three lumens.

Claims 20-21 (Previously Cancelled Without Prejudice or Disclaimer)

22. (Previously Presented) A catheter as defined in claim 14 wherein at least two lumens extend to and open to the distal terminus of the catheter.

23. (Previously Presented) A catheter as defined in claim 14 wherein the distal terminus has an outer diameter in the range of approximately .055 inch to .063 inch.

24. (Previously Presented) A catheter as defined in claim 14 wherein the distal terminus has an outer diameter of approximately .059 inch or less.

25. (Previously Cancelled Without Prejudice or Disclaimer)

26. (Currently Amended) A catheter comprising:

a shaft comprising proximal and distal ends [1] [2]

a tip at the distal end of the shaft having a tapered portion over which the tip outer diameter is gradually reduced [1] [2]

a distal terminus [1] [2]

an untapered length of shaft adjacent the tapered portion opposite the distal terminus;

and two or more lumens, at least one of which is sized to receive a 0.035 inch guidewire, the lumens being spaced apart from one another by a predetermined distance in the untapered lengths a corresponding distance between the lumens in the tapered portion being different from the predetermined distance;

wherein the distal terminus has an outer diameter within the range of 0.055 inch to 0.063 inch; and

the tapered portion of the tip has a length within the range of 1.5 mm to 4.5 mm.

27. (Currently Amended) A catheter according to claim 26, wherein the outer diameter of the distal terminus is approximately 0.059 inch.
28. (Currently Amended) A catheter according to claim 26, wherein the length of the tapered portion of the tip is approximately 3 mm.
29. (Currently Amended) A catheter as defined in claim 15, wherein the cutting wire exits the lumen along a portion of the shaft and reenters the lumen through a distal skive hole ~~at a point adjacent the distal tip in the untapered length~~ of the shaft; ~~a tip length is defined~~ between the distal skive hole and the distal terminus ~~measuring is~~ within the range of 4.5 to 6 mm; and the tapered portion is positioned between the skive hole and the distal terminus.
30. (Previously Presented) A catheter as defined in claim 26, wherein the shaft comprises three lumens.
31. (Previously Presented) A catheter as defined in claim 26, wherein at least two lumens extend to and open to the distal terminus of the catheter.
32. (New) A catheter as defined in claim 14, wherein the distance between the lumens in the tapered portion is less than the predetermined distance.
33. (New) A catheter as defined in claim 26, wherein the distance between the lumens in the tapered portion is less than the predetermined distance.